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July 27, 2006

VIA HAND DELIVERY
The Honorable Charles L.A. Terreni
Chief Clerk and Administrator
The Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

RE: Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC ("Duke Energy Carolinas") Annual Review of Base Rates for Fuel Costs. Docket No. 2006-3-E
Motion for Confidential Treatment

Dear Mr. Terreni:

Pursuant to the Public Service Commission of South Carolina ("Commission") Scheduling Order issued in the above-referenced docket, Duke Energy Carolinas, through counsel, hereby files ten copies of the direct testimonies and exhibit(s) of Duke Energy Carolinas' witnesses Janice D. Hager, Ronald A. Jones, M. Elliott Batson, and William R. McCollum, Jr.

Certain information contained in Ms. Hager's and Mr. Jones' testimonies and exhibit(s) is confidential, therefore, pursuant to Order No: 2005-226, "ORDER REQUIRING DESIGNATION OF CONFIDENTIAL MATERIALS", we enclose the referenced confidential material in a separate envelope marked, "Confidential". The ten copies of Ms. Hager's and Mr. Jones' testimonies and exhibit(s) filed today are redacted.

Ms. Hager's and Mr. Jones' un-redacted testimonies and exhibit(s) contain confidential information which is proprietary and/or commercially sensitive and/or competitively sensitive and/or confidential and/or trade secrets, pursuant to 26 S.C. Code Ann. Regs. 103-804(Y)(2)(Cum. Supp. 2005).

Please consider this correspondence as Duke Energy Carolinas' Motion to accord confidential treatment to Ms. Hager's and Mr. Jones' testimonies and exhibit(s) so designated.

RETURN DATE: 06 Duke
SERVICE: 07 Duke

By copy of this correspondence, Duke Energy Carolinas serves the testimonies and exhibit(s) referenced hereinabove on all parties of record to this proceeding. All parties of Record have previously entered into Confidentiality Agreements with Duke Energy Carolinas, and therefore the confidential portion of Ms. Hager's and Mr. Jones' testimonies and exhibit(s) is provided to all parties of Record pursuant to such Agreements and 26 S.C. Code Ann. Regs. 103-804(Y)(2)(Cum. Supp. 2005).

With kind regards, we are

Sincerely,

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(All of the South Carolina Office of Regulatory Staff)
Scott Elliott, Esquire

TESTIMONY OF JANICE D. HAGER

FOR

DUKE ENERGY CAROLINAS

PSCSC DOCKET NO. 2006-003-E

Q. PLEASE STATE YOUR NAME, ADDRESS AND POSITION.

A. My name is Janice D. Hager. My business address is 526 South Church Street, Charlotte, North Carolina. I am Vice President, Rates and Regulatory Affairs for Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or "the Company").

Q. WHAT ARE YOUR PRESENT RESPONSIBILITIES AT DUKE ENERGY CAROLINAS?

A. I am responsible for all state and federal regulatory operational filings, the administration of retail and wholesale rates, and the handling of customer inquiries to the Office of the Regulatory Staff.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I am a civil engineer, having received a Bachelor of Science in Engineering from the University of North Carolina at Charlotte. I began my career at Duke Energy Carolinas in 1981 and have had a variety of responsibilities across the Company in areas of piping analyses, nuclear station modifications, new generation licensing, Integrated Resource Planning and Demand Side Management. I joined the Rate Department in 1996 and my initial responsibilities included implementation of Duke Energy Carolinas' Open Access Transmission Tariff. I was promoted to Manager, Rate Design, and in 1999, to Manager, Rate Design and Analysis with responsibility for the Rate Design, Revenue Analysis and Load Research groups. In April 2003, I was promoted to the position of Vice President of Rates and Regulatory Affairs for Duke Energy Carolinas. I am a registered Professional Engineer in North Carolina and South Carolina and am a former chair of the Southeastern Electric Exchange Rates and Regulation Section.

Q. ARE YOU FAMILIAR WITH THE ACCOUNTING PROCEDURES AND BOOKS OF ACCOUNT OF DUKE ENERGY CAROLINAS?

A. Yes. As ordered by this Commission, the books of account of Duke Energy Carolinas follow the uniform classification of accounts prescribed by the Federal Energy Regulatory Commission.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to provide the actual fuel cost data for the period July 2005 through June 2006, the historical period under review in this proceeding; the projected fuel cost information for the period July 2006 through September 2007; and the Company's recommended fuel rate for the period October 2006 through September 2007.

Q. YOUR TESTIMONY INCLUDES 6 EXHIBITS. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR DIRECTION AND UNDER YOUR SUPERVISION?

A. Yes. Each of these exhibits was prepared at my direction and under my supervision.

Q. PLEASE PROVIDE A DESCRIPTION OF THE EXHIBITS.

A. The exhibits and descriptions are as follows:

Exhibit 1 - Total Company Fuel Costs Detail for the Test Period

Exhibit 2 - Coal Cost per MBTU Burned

Exhibit 3 - Nuclear Cost per MBTU Burned
Exhibit 4 - Source of Generation by Period
Exhibit 5 - Current Period Fuel Costs and Revenues
Exhibit 6 - Projected Period Fuel Costs and Revenues

Q. MS. HAGER, PLEASE PROVIDE A GENERAL DESCRIPTION OF DUKE ENERGY CAROLINAS.

A. Duke Energy Carolinas serves more than 2 million customers in the Piedmont Carolinas with a service area that covers over 22,000 square miles. The Company operates more than 13,000 miles of transmission lines and almost 100,000 miles of distribution lines. In 2005, the Company's system peak demand (single highest hour of use) was 17,294 MWs.

Duke Energy Carolinas' South Carolina retail customers, which represent about 25% of the Company's total customer base, consumed over 20 billion kWhs of electricity in 2005. Duke Energy Carolinas' South Carolina residential customers consumed 28% of that total, general service customers consumed 25%, and industrial customers consumed 47%.

Q. IS DUKE ENERGY CAROLINAS' LOAD GROWING?

A. Yes. Duke Energy Carolinas' peak demand and energy use are growing at a rate of about 1.6% per year.

Q. HOW DOES DUKE ENERGY CAROLINAS MEET ITS CUSTOMERS' NEEDS FOR ELECTRICITY?

A. Duke Energy Carolinas meets its customers' needs for electricity through a combination of Company-owned generation, purchases of power from others, and customer demand-side options. Demand-side options include residential and non-residential programs that provide credits to customers for allowing the Company to curtail their electricity usage on occasion. In his testimony, Mr. McCollum describes Duke Energy Carolinas' generation portfolio and how the different units operate.

Q. PLEASE DESCRIBE THE RELATIVE COSTS OF THE VARIOUS FUELS USED BY DUKE ENERGY CAROLINAS FOR ITS GENERATING UNITS.

A. Nuclear fuel is the least costly fuel for the Company with a cost of approximately 0.4 cents/kWh. Coal costs are approximately 2.3 to 3.3 cents/kWh depending on the generating plant. While the cost of natural gas and fuel oil on a cents per kwh basis are significantly higher, the fuel expense for these fuels is small compared to total fuel expense due to the limited need to call on our combustion turbines. The fuel cost of conventional hydroelectric generation is essentially zero. The cost of pumped storage hydroelectric generation is the fuel cost of the generating unit used to pump the water to the upper reservoir. Hydroelectric operation is limited by the amount of rainfall and the amount of water that can be drawn through the units in compliance with the Company's operational licenses.

Q. HOW MUCH OF DUKE ENERGY CAROLINAS' ENERGY CONSUMED IN THE TEST PERIOD WAS GENERATED BY EACH TYPE OF GENERATING UNIT?

A. During the test period, the energy produced by Duke Energy Carolinas' generation was as follows:

Fossil fuels	52%	
Nuclear	47%	
Hydro	1%	(net of megawatt-hours used for pumped storage)

Q. PLEASE DESCRIBE HOW DUKE ENERGY CAROLINAS INCLUDED FUEL COSTS RELATED TO PURCHASES IN ITS FUEL EXPENSES FOR THE TEST PERIOD.

A. Section 58-27-865(A) of the 1976 Code of Laws of South Carolina sets forth the definition of fuel costs related to purchased power as follows:

> (A)(1) The words 'fuel cost' as used in this section include the cost of fuel, fuel costs related to purchased power, and the cost of SO2 emission allowances as used and must be reduced by the net proceed of any sales of SO2 emission allowances by the utility.
>
> (2) In order to clarify the intent of this section, 'fuel costs related to purchased power', as used in subsection (A)(1) shall include:
>
> (a) costs of firm generation capacity purchases, which are defined as purchases made to cure a capacity deficiency or to maintain adequate reserve levels; 'costs of firm generation capacity purchases' include the total delivered costs of firm generation capacity purchased and shall exclude generation capacity reservation charges, generation capacity option charges, and any other capacity charges;
>
> (b) the total delivered cost of economy purchases of electric power including, but not limited to, transmission charges; 'economy purchases' are defined as purchases made to displace higher cost generation, at a price which is less than the purchasing utility's avoided variable costs for the generation of an equivalent amount of electric power.

In accordance with the statute, the Company used the avoided cost method to determine the fuel component of purchases of power for Duke Energy Carolinas' retail customers. Under this methodology, the Company determines the costs it would have incurred in the absence of the purchase. This cost is determined by use of a model that identifies the incremental cost of the unit that would have been dispatched in the absence of the purchase and compares that cost to the cost of the purchase. The incremental cost includes the fuel and certain variable operation and maintenance costs. The Company includes in fuel costs the lower of the cost of the energy purchase or the cost Duke Energy Carolinas would have incurred. Duke Energy Carolinas' customers thereby are ensured of receiving the benefit of purchased power.

Q. MS. HAGER, PLEASE DESCRIBE HOW NUCLEAR COSTS ARE INCLUDED IN THE COMPANY'S FUEL EXPENSES.

A. The cost of each fuel assembly is determined when the fuel is loaded in the reactor. The costs include yellowcake (uranium), conversion, enrichment and fabrication. In his testimony, Witness Jones describes the components that make up nuclear fuel in greater detail. An estimate of the energy content of each fuel assembly is also made. Nuclear fuel expenses for each month are based on the energy output in units of millions BTUs (MBTUs) of each fuel assembly in the core and Department of Energy 'High Level Waste' and 'Decontamination and Decommissioning Fund' fees. A cost per MBTU is determined by dividing the cost of the assembly by its expected energy output. Each month a calculation of the MBTU output of an assembly is priced at its cost per MBTU.

During the life of a fuel assembly, the expected energy output may change as a result of actual plant operations. When this occurs, changes are made in the cost per MBTU for the remaining energy output of the assembly. New fuel assembly orders are planned for cycle lengths of approximately eighteen months. The length of a cycle is the duration of time between when a unit starts up after refueling and when it starts up after its next refueling. During a refueling outage, approximately one-third of the fuel in the reactor is replaced.

Q MS. HAGER, CAN YOU EXPLAIN HOW COAL COSTS ARE INCLUDED IN THE COMPANY'S FUEL EXPENSES?

A. All of the Company's coal is delivered by rail. As coal is received at each plant, it is weighed and sampled for quality verifications. Subsequently, the purchasing department compares the weight, price and quality with the purchase order and railroad waybill. Purchasing personnel make adjustments to the cost of coal purchased in those cases where the quality of the coal received varies from contract specifications for British Thermal Unit (BTU), ash, and sulfur content.

Duke Energy Carolinas also performs moisture and BTU tests as the coal is delivered to the coal bunkers for each boiler. BTU tests measure the energy content of the coal. To the extent that the moisture content of the coal burned differs from the moisture content of coal purchased, an adjustment is subsequently made to the inventory tonnage. Wet coal weighs more than dry coal and without the moisture adjustment, tons burned would be overstated and inventory would be understated.

Duke Energy Carolinas calculates coal costs charged to fuel expense on an individual plant basis. The expense charge is the product of the tons of coal conveyed to the bunkers for a generating unit during the month multiplied by the average cost of the coal. The number of tons is determined by using scales located on the conveyor belt running to the unit's coal bunkers. The average cost reflects the total cost of coal on hand as of the beginning of the month, computed using the moving average inventory method, plus the cost of coal delivered to the plant during the month. Duke Energy Carolinas determines the cost of coal based upon the invoice for the coal and the freight bill, and does not include any non-fuel cost or coal handling cost at the generating station.

Duke Energy Carolinas conducts annual physical inventories of coal piles through aerial surveys. The Company made an adjustment to book inventory for coal in December 2005 based on the results of the annual inventory.

Q. MS. HAGER, WHAT DOES EXHIBIT 1 SHOW?

A. Hager Exhibit 1 sets forth the total system actual fuel costs (as burned) that the Company incurred from July 2005 through June 2006. This exhibit also shows fuel costs by type of generation and total megawatt hours (MWH) generated during this period. The monthly fluctuations in total fuel cost during this period are primarily due to refueling and other outages at the nuclear stations, weather sensitive sales and the availability of hydroelectric generation.

Q. WHAT IS THE MAGNITUDE OF THE COMPANY'S FUEL COST COMPARED TO THE TOTAL COST OF SERVICE?

A. Fuel costs continue to be the largest cost item Duke Energy Carolinas incurs in providing electric service. For the twelve months ended May 2006, fuel and the fuel component of purchased power represented approximately 24% of the Company's total revenue. Of fuel costs, coal costs are the largest component and during the period July 2005 through June 2006 comprised approximately 85% of the costs of the Company's fuel burned.

Q. MS. HAGER, WHAT CHANGES HAVE OCURRED IN THE UNIT COST OF FUEL DURING RECENT REPORTING PERIODS?

A. Hager Exhibits 2 and 3 graphically portray the "as burned" cost of both coal and nuclear fuel in cents per MBTU for the twelve month periods ending January 2004 through June 2006. As Exhibit 2 shows, coal costs increased during the period as testified to by Witness Batson. Exhibit 3 shows that nuclear fuel costs have been relatively stable over the same period. Witness Jones discusses changes in the cost of the various components of nuclear fuel in his testimony. The costs incurred by Duke Energy Carolinas for the other fossil fuels used by the Company, natural gas and fuel oil, are a very small percentage of the total fuel costs. The costs incurred during the test period for these fuels were approximately $28 million, or 2% of the Company's total fuel expense for the year.

Duke Energy Carolinas expects its composite cost of fuel to increase. As testified to by Witness Batson, the market price of coal has come down slightly in recent months; however, the Company's cost of coal, which is more than six times the cost of nuclear fuel, has increased over the past several years and continues to increase as older below-market contracts expire. The Company expects that future KWH growth will be met primarily from the Company's coal generating units. In addition, as discussed in greater detail by Witness Jones in his testimony, the market price of two of the components of nuclear fuel has begun to increase.

Q. WHAT DOES HAGER EXHIBIT 4 SHOW?

A. Hager Exhibit 4 graphically shows generation by type for the current and projected periods as well as three prior periods. As the Exhibit demonstrates, nuclear and fossil fuel account for nearly 100% of the Company's total generation.

Q. MS. HAGER, DO YOU BELIEVE THE COMPANY'S ACTUAL FUEL COSTS INCURRED DURING THE PERIOD JULY 2005 THROUGH JUNE 2006 WERE REASONABLE?

A. Yes. I believe the costs are reasonable and that Duke Energy Carolinas has demonstrated that it meets the criteria set forth in Section 58-27-865(F) of the Code of Laws of South Carolina. These costs also reflect the Company's continuing efforts to maintain reliable service and an economical generation mix, thereby minimizing the total cost of providing service to our South Carolina retail customers.

Q. WHAT HAS BEEN THE COMPANY'S FUEL RECOVERY EXPERIENCE DURING THE JULY 2005 THROUGH JUNE 2006 TEST PERIOD?

A. Hager Exhibit 5 shows the actual fuel costs incurred for the period July 2005 through June 2006 and the estimated fuel costs for July 2006 through September

2006. This exhibit compares the fuel costs incurred with the revenues collected applying the applicable fuel rate of 1.5802¢/KWH for the period October 2005 through September 2006.

Q. HAVE THERE BEEN ANY ADJUSTMENTS TO FUEL EXPENSE IN THE TEST PERIOD?

A. Yes. The test period includes adjustments to reduce fuel expense related to two settlements in 2005. Fossil fuel expense has been reduced by ***BEGIN CONFIDENTIAL*** [redacted] ***END CONFIDENTIAL*** as a result of a settlement between the Company and Norfolk Southern Railway Company. Duke Energy Carolinas booked this amount as a reduction to coal inventory in September 2005 which reduced the average cost of coal in inventory, thereby reducing coal expense as it was burned. The litigation and settlement are described further by Witness Batson. Additionally, nuclear fuel expense was reduced in the month of August 2005 by approximately $12 million as the result of a settlement between the DOE and nine utility companies including Duke Energy Carolinas of litigation related to enrichment services for nuclear fuel. The litigation and settlement related to the nuclear settlement are described further by Witness Jones. Both of these settlements were negotiated by the Company on behalf of customers. Although Duke Energy Carolinas incurred litigation expenses on behalf of its customers to achieve these settlements, the Company has elected to offset fuel expenses with the total proceeds of these settlements (less the Catawba Joint Owner's Share of the nuclear fuel settlement) in order to mitigate the impact of rising fuel costs on its South Carolina customers.

Q. WHAT IS THE BASIS FOR ESTIMATING FUEL COSTS AS SHOWN ON HAGER EXHIBITS 5 AND 6?

A. Duke Energy Carolinas developed the projections shown on Hager Exhibits 5 and 6 based on the latest information available to the Company. The projected kWh sales are from the Company's spring 2006 sales forecast. Projected nuclear generation reflects planned outages, which include refueling outages at 6 units including one that extends beyond the forecast period. The projection of fuel costs are based on a 97% capacity factor for the nuclear units while they are running. The Company's most recent nuclear fuel cost estimate was used to determine projected nuclear fuel expense. Estimated hydroelectric generation for the period is based on median generation for the period 1975 - 2005. The Company estimates fuel costs of energy purchases based on historical purchase quantities and price. Oil and gas fuel costs and generation are based on a three year average. The Company assumes that the remainder of the customers' energy needs are served from coal-fired units. The projected price for coal contracts is based on the price of coal contracts that will be in place during the projection period along with the current market price for coal needs beyond the currently contracted amounts.

Q. WHAT DOES THE COMPANY ANTICIPATE ITS FUEL RECOVERY POSITION WILL BE AS OF SEPTEMBER 30, 2006?

Duke Energy Carolinas estimates that by the end of the current billing period (September 30, 2006), the Company will be under-recovered in South Carolina by approximately $4,920,000.

Q. MS. HAGER, WHAT IS THE COST OF FUEL THE COMPANY PROJECTS FOR RECOVERY DURING THE PERIOD OCTOBER 2006 THROUGH SEPTEMBER 2007?

A. Hager Exhibit 6 sets forth projected fuel costs for the period October 2006 through

September 2007. As shown on line 7, the fuel cost estimated for recovery during this period is 1.7543¢/KWH. After adjusting for the cumulative under-recovery, the adjusted fuel cost is 1.7760¢/KWH. The Company seeks Commission approval for a proposed fuel factor of 1.7760¢/KWH. Based on our estimate, the proposed fuel factor would result in the Company being neither under- or over-recovered in its fuel cost at the end of the billing period in September 2007.

Q. MS. HAGER, DOES THAT CONCLUDE YOUR TESTIMONY?

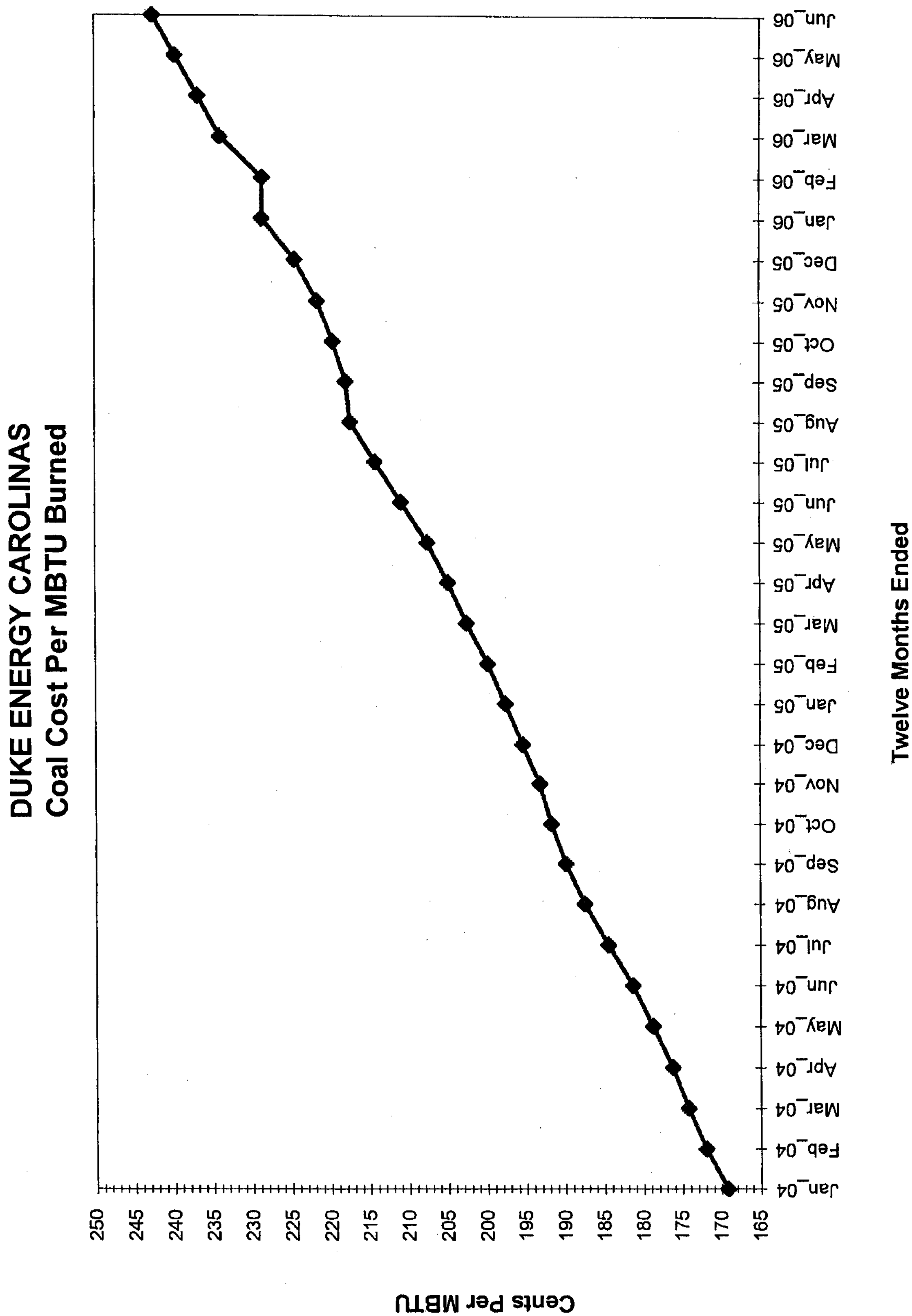
A. Yes, it does.

Hager Exhibit 1

DUKE ENERGY CAROLINAS
SOUTH CAROLINA FUEL CLAUSE
2006 ANNUAL FUEL HEARING
TOTAL COMPANY FUEL COST
$000

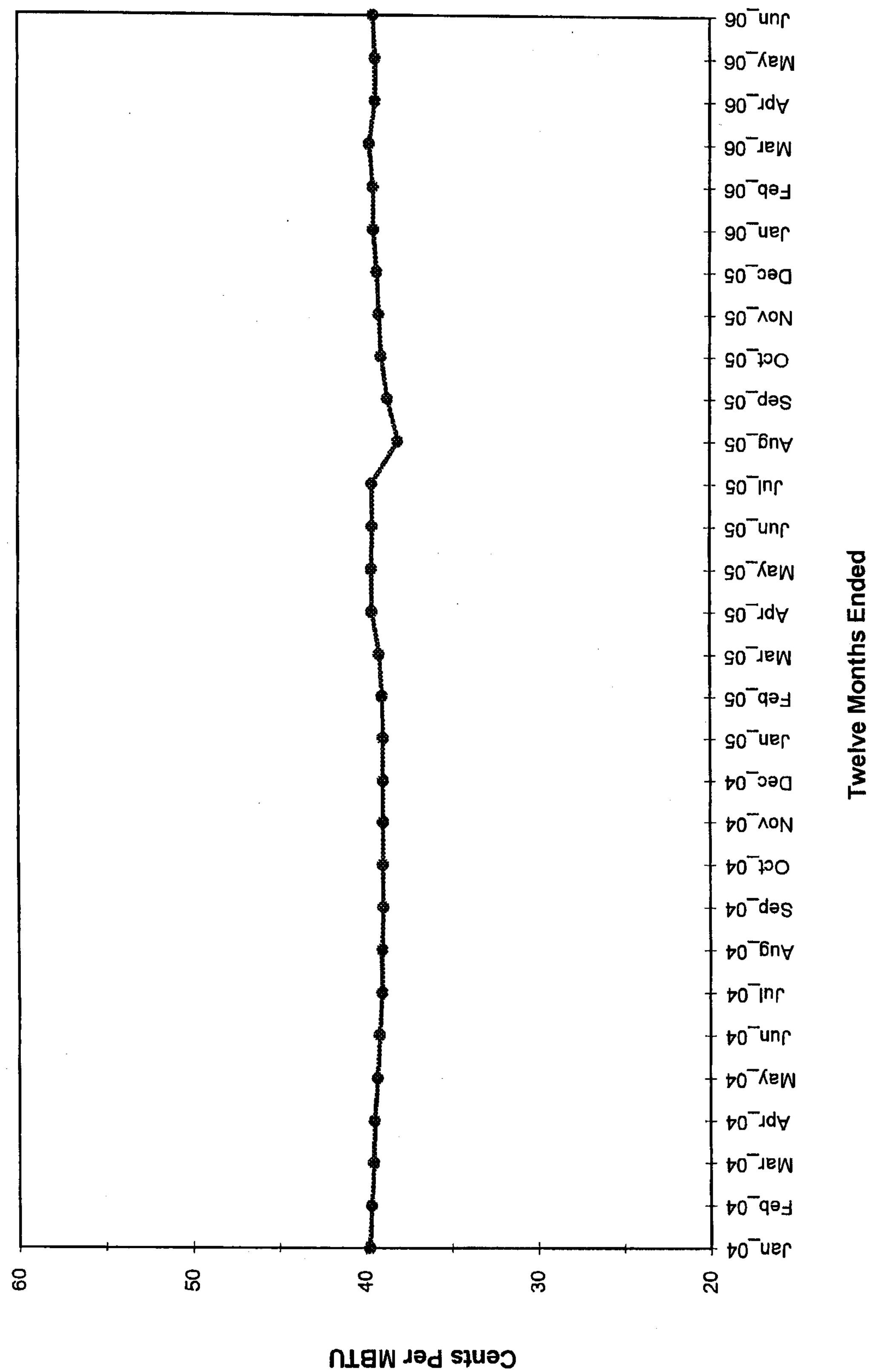
Line No.	Description	Mo. Avg. 15Mo. 6/05	July 2005	Aug. 2005	Sept. 2005	Oct. 2005	Nov. 2005	Dec. 2005	Jan. 2006	Feb. 2006	March 2006	April 2006	May 2006	June 2006	Mo. Avg. 12Mo. 6/06
1	Coal	$71,221	$102,667	$110,982	$90,125	$77,720	$71,883	$80,813	$79,225	$69,538	$94,652	$76,030	$97,559	$109,441	$88,386
2	Emission Allowance Exp.	$550	$888	$1,119	$1,020	$857	$800	$861	$900	$1,015	$986	$865	$1,115	$1,234	$972
3	Oil	1,162	668	745	1,858	1,453	948	1,492	2,612	1,454	1,205	1,247	1,978	874	1,378
4	Gas	446	2,238	2,782	1,610	694	14	207	2,191	227	(93)	567	671	540	971
5	Nuclear	13,365	15,053	6,259	15,720	14,110	12,762	15,525	15,774	14,258	15,345	14,227	12,540	14,027	13,800
6	Total	$86,744	$121,514	$121,887	$110,333	$94,834	$86,407	$98,898	$100,702	$86,492	$112,095	$92,936	$113,863	$126,116	$105,507
7	MWH Gen.	6,920,390	8,371,452	8,700,366	7,515,180	6,572,122	6,317,593	7,419,685	7,172,006	7,013,275	7,262,183	6,443,594	7,053,350	7,684,709	7,293,793

Hager Exhibit 2

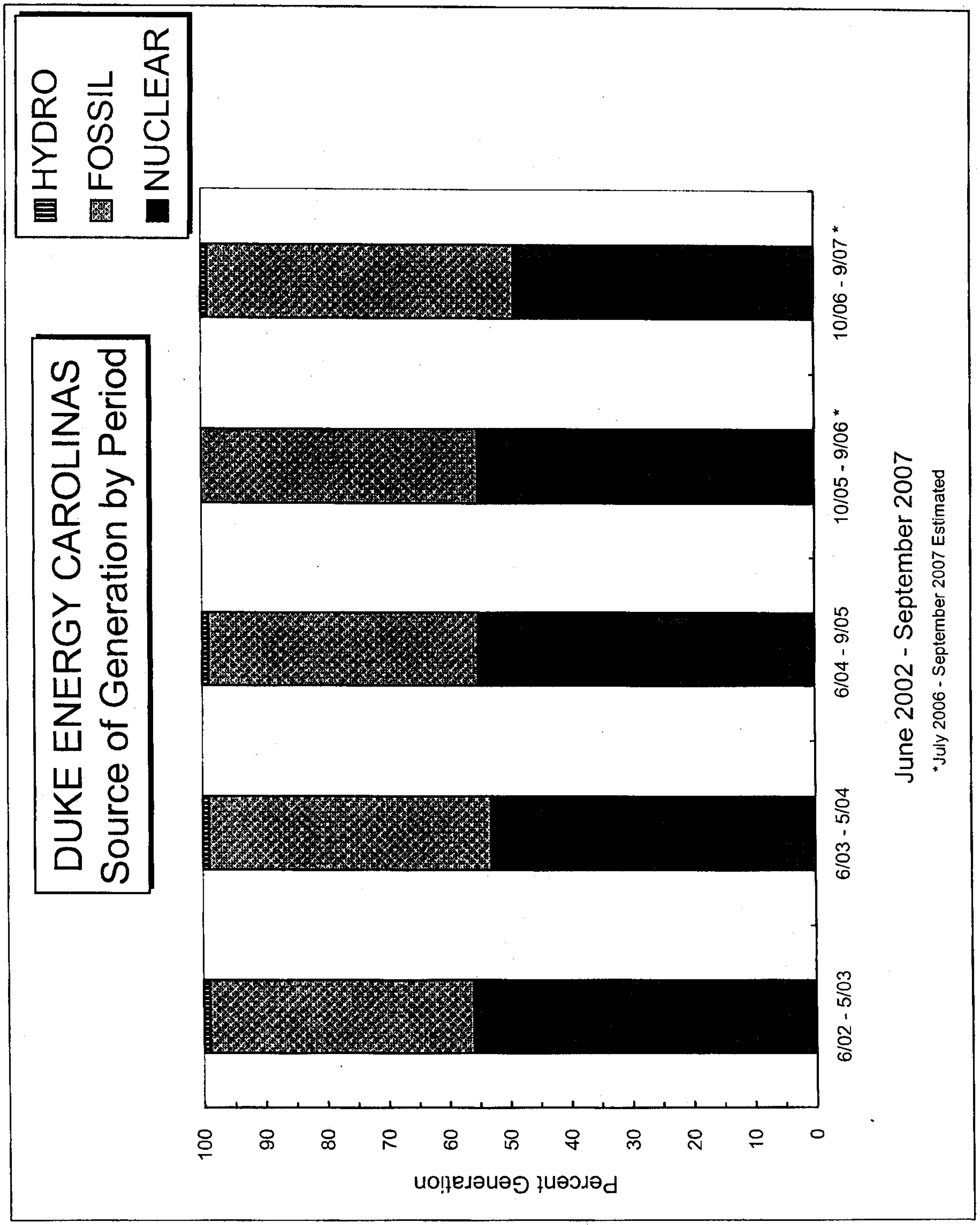


Hager Exhibit 3

DUKE ENERGY CAROLINAS
Nuclear Cost Per MBTU Burned



Hager Exhibit 4



DUKE ENERGY CAROLINAS
SOUTH CAROLINA FUEL CLAUSE
2006 ANNUAL FUEL HEARING
CURRENT PERIOD FUEL COSTS INCURRED
$000

Line No.	Item	July 2005	Aug. 2005	Revised Sept. 2005	Revised Oct. 2005	Revised Nov. 2005	Revised Dec. 2005	Jan. 2006	Feb. 2006	March 2006	Revised April 2005	May 2006	June 2006	Estimated July 2006	Estimated Aug. 2006	Estimated Sept. 2006
1	Fossil Fuel	$105,573	$114,510	$93,593	$79,867	$72,845	$82,512	$84,028	$71,219	$95,764	$77,844	$100,209	$110,855	$149,835	$149,837	$120,616
2	Emission Allowance Exp.	888	1,119	1,020	857	800	861	900	1,015	986	865	1,115	1,234	972	972	972
3	Nuclear Fuel	15,053	6,259	15,719	14,109	12,761	15,524	15,773	14,257	15,344	14,227	12,540	14,027	15,632	15,632	13,694
4	Fuel In Purchases	2,688	4,550	4,238	4,878	2,335	2,304	587	1,101	921	9,906	4,525	4,833	2,411	2,411	2,411
5	Fuel In Intersystem Sales	2,855	19,753	9,864	14,221	8,508	16,529	23,536	26,650	23,695	10,478	12,494	9,619	19,914	19,914	19,914
6	Total Costs	$121,347	$106,685	$104,706	$85,490	$80,233	$84,672	$77,752	$60,942	$89,320	$92,364	$105,895	$121,330	$148,936	$148,938	$117,779
7	MWH Sales	7,043,663	7,861,840	7,806,750	6,438,582	5,853,873	6,380,319	6,533,118	6,231,874	5,912,447	6,001,036	5,798,502	6,802,706	7,851,128	8,176,403	7,459,979
8	Fuel Cost ¢/KWH	1.7228	1.3570	1.3412	1.3278	1.3706	1.3271	1.1901	0.9779	1.5107	1.5391	1.8262	1.7836	1.8970	1.8216	1.5788
9	¢/KWH Billed	1.1500	1.1500	1.1500	1.5802	1.5802	1.5802	1.5802	1.5802	1.5802	1.5802	1.5802	1.5802	1.5802	1.5802	1.5802
10	SC Retail MWH Sales	1,906,553	2,157,117	2,088,261	1,800,951	1,695,074	1,764,325	1,776,344	1,767,429	1,606,021	1,670,377	1,650,703	1,906,676	2,093,176	2,197,737	2,094,838
11	$ (Over) Under	$10,921	$4,465	$3,993	($4,546)	($3,553)	($4,466)	($6,931)	($10,645)	($1,116)	($687)	$4,060	$3,878	$6,631	$5,305	($29)
12	Economic Purchase Adjtmt. per Docket 2005-3-E			$2,670												
13	Write off remainder of $16M per Order No. 2004-603			(5,030)												
14	Cumulative (Over) Under	$10,921	$15,386	$17,019	$12,473	$8,920	$4,454	($2,477)	($13,122)	($14,238)	($14,925)	($10,865)	($6,987)	($356)	$4,949	$4,920

Hager Exhibit 5

DUKE ENERGY CAROLINAS
SOUTH CAROLINA FUEL CLAUSE
2006 ANNUAL FUEL HEARING
PROJECTED FUEL COST 10/06 - 9/07
$000

Line No.	Item	Oct. 2006	Nov. 2006	Dec. 2006	Jan. 2007	Feb. 2007	March 2007	April 2007	May 2007	June 2007	July 2007	Aug. 2007	Sept. 2007	Total
1	Fossil Fuel	$117,300	$122,807	$126,387	$127,522	$108,388	$106,182	$113,106	$110,794	$132,196	$158,712	$158,503	$128,691	$1,510,589
2	Nuclear Fuel	11,755	12,519	14,525	15,950	14,499	14,432	11,926	14,930	15,453	15,950	15,950	15,248	173,137
3	Fuel In Purchases	2,411	2,411	2,411	2,411	2,411	2,411	2,411	2,411	2,411	2,411	2,411	2,411	28,934
4	Fuel In Intersystem Sales	19,914	19,914	19,914	19,914	19,914	19,914	19,914	19,914	19,914	19,914	19,914	19,914	238,968
5	Total Fuel Costs	$111,552	$117,823	$123,409	$125,969	$105,384	$103,111	$107,529	$108,221	$130,146	$157,159	$156,950	$126,436	$1,473,692
6	Total MWH Sales	5,998,963	6,369,357	7,024,312	7,351,008	6,967,971	6,255,546	6,182,723	6,156,868	7,184,100	8,092,508	8,416,414	8,002,890	84,002,660
7	Fuel Costs Incurred ¢/kwh	1.8595	1.8498	1.7569	1.7136	1.5124	1.6483	1.7392	1.7577	1.8116	1.9420	1.8648	1.5799	1.7543
8	SC Retail MWH Sales	1,757,606	1,726,957	1,801,680	1,921,428	1,885,821	1,713,020	1,750,856	1,744,262	1,949,449	2,120,482	2,224,362	2,121,395	22,717,318
9	SC Fuel Costs	$32,683	$31,945	$31,654	$32,926	$28,521	$28,236	$30,451	$30,659	$35,316	$41,180	$41,480	$33,516	$398,530
10	(Over)/Under On Ex. 5													4,920
11	SC Fuel Costs													403,450
12	SC Fuel Cost ¢/kwh													1.776

Hager Exhibit 6

TESTIMONY OF RONALD A. JONES

FOR

DUKE ENERGY CAROLINAS

PSCSC DOCKET NO. 2006-003-E

Q. PLEASE STATE YOUR NAME, ADDRESS AND POSITION.

A. My name is Ronald A. Jones. My business address is 526 South Church Street, Charlotte, North Carolina. I am Senior Vice President, Nuclear Operations for Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or "the Company").

Q. WHAT ARE YOUR PRESENT RESPONSIBILITIES AT DUKE ENERGY CAROLINAS?

A. As senior vice president of nuclear operations, I am responsible for providing direct oversight for the day-to-day safe and reliable operation of all three Duke Energy Carolinas-operated nuclear stations—Oconee, McGuire and Catawba. This includes providing direction for operations, security, safety, engineering, maintenance, radiation protection, chemistry, etc.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I graduated from Virginia Polytechnic Institute and State University in Blacksburg, Virginia with a bachelor of science degree in electrical engineering. I am a member of the American Nuclear Society and the Institute of Electrical and Electronic Engineers, and a past member of the Tennessee Valley Authority and Progress Energy's Nuclear Safety Review Boards. I began my career at Duke Energy Carolinas in 1980 as an engineer at Catawba Nuclear Station. I received my senior operator license in 1987. After a series of promotions, I was named manager, maintenance engineering, in 1988; superintendent, instrument and electrical, in 1991; superintendent, operations, McGuire Nuclear Station, in 1994; station manager, Catawba Nuclear Station, in 1997; and station manager, Oconee Nuclear Station, in 2001. I was named vice president, Oconee Nuclear Station, in 2002. I was named to senior vice president of nuclear operations in January 2006.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to discuss the performance of Duke Energy Carolinas' nuclear generation fleet during the test period. In addition, I provide information regarding the Company's nuclear fuel purchasing practices and costs for the test period and describe changes forthcoming in the 2006/2007 forecast period.

Q. YOUR TESTIMONY INCLUDES 4 EXHIBITS. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR DIRECTION AND UNDER YOUR SUPERVISION?

A. Yes. Each of these exhibits was prepared at my direction and under my supervision.

Q. PLEASE PROVIDE A DESCRIPTION OF THE EXHIBITS.

A. The exhibits and descriptions are as follows:

Jones Exhibit 1 - Nuclear Plant Performance Data, including calculation of the nuclear capacity factor for the test period pursuant to SC Code Ann. § 58-27-865 and outage data for the test period and forecast period.

Jones Exhibit 2 - Nuclear Fuel Cycle

Jones Exhibit 3 - Nuclear Fuel Procurement Practices

Jones Exhibit 4 - Nuclear Fuel Purchases

Q. PLEASE DESCRIBE DUKE ENERGY CAROLINAS' NUCLEAR GENERATION PORTFOLIO.

A. Duke Energy Carolinas' nuclear generation portfolio consists of approximately 5,000 MWs of generating capacity, made up as follows:

Oconee Nuclear Station - 2,538 MWs

McGuire Nuclear Station - 2,200 MWs

Catawba Nuclear Station - 282 MWs (Duke Energy Carolinas' 12.5% ownership of the Catawba Nuclear Plant)

Q. MR. JONES, PLEASE PROVIDE A GENERAL DESCRIPTION OF DUKE ENERGY CAROLINAS' NUCLEAR GENERATION ASSETS.

A. Duke Energy Carolinas' nuclear fleet consists of three generating stations. Oconee Nuclear Station, located in Oconee County, South Carolina, began commercial operation in 1973 and was the first nuclear station designed, built and operated by Duke Energy Carolinas. It has the distinction of being the second nuclear station in the country to have its licenses renewed, originally issued for 40 years, by the Nuclear Regulatory Commission ("NRC") for an additional 20 years. McGuire Nuclear Station, located in Mecklenburg County, North Carolina began commercial operation in 1981. Duke Energy Carolinas' jointly owns the Catawba Nuclear Station, located on Lake Wylie in York County, South Carolina with North Carolina Municipal Power Agency Number One, North Carolina Electric Membership Corporation, Piedmont Municipal Power Agency and Saluda River Electric Cooperative, Inc. The NRC renewed the licenses for McGuire and Catawba in 2003. The Company's nuclear fleet supplied almost half of the power used by its customers in the test period. Production costs for the Company's nuclear fleet are among the lowest in the nation.

Q. WHAT ARE THE COMPANY'S OBJECTIVES IN THE OPERATION OF ITS NUCLEAR GENERATION ASSETS?

A. The primary objective of Duke Energy Carolinas' nuclear generation department is to provide safe, reliable and cost effective electricity to our Carolinas customers. This objective is achieved though our focus in a number of key areas. Operations personnel and other station employees are well trained and execute their responsibilities to the highest standards, in accordance with detailed procedures. We maintain station equipment and systems reliably, and ensure timely implementation of work plans and projects that enhance the performance of systems, equipment and personnel. Station refueling outages are conducted through the precise execution of well-planned, quality work activities, which effectively ready the plant for operation until the next planned outage.

Q. MR. JONES, PLEASE DISCUSS THE PERFORMANCE OF THE COMPANY'S NUCLEAR GENERATING SYSTEM DURING THE PERIOD JULY 2005 THROUGH JUNE 2006.

A. Duke Energy Carolinas' nuclear fleet continuously met or exceeded all NRC requirements and Institute of Nuclear Power Operations ("INPO") standards during the test period. All three of the Company's nuclear stations were assessed with an INPO "1" rating, the highest score, in their most recent Evaluation and Assessment. For the tenth consecutive year, the Electric Power Research Institute has ranked Catawba Nuclear Station as the most thermally efficient nuclear power plant in the United States. In 2005, Catawba Unit 2 had the lowest heat rate in the country and Catawba Unit 1 came in second with heat rates of 9,545 Btu per kwh and 9,548 Btu per kwh, respectively. The Company's 2005 nuclear system total capacity factor was 93.68 percent. This was the second highest capacity factor recorded on the Duke Energy Carolinas' nuclear system. In addition, Catawba Unit 2 achieved a capacity factor of 102.11% which was the third highest capacity factor of any unit in the nation in 2005 as reported by *Nucleonics Week*. The 2005 net generation was also the second highest recorded on the Company's nuclear system at 57,412,178 megawatt-hours.

The Company's nuclear plants operated extremely well during the test period. Jones Exhibit 1 sets forth the achieved nuclear capacity factor for the period July 2005 through June 2006 based on the criteria set forth in Section 58-27-865, Code of Laws of South Carolina. The statute states in pertinent part as follows:

> There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation facility or system, as applicable, if the utility achieved a net capacity factor of ninety-two and one-half percent or higher during the period under review. The calculation of the net capacity factor shall exclude reasonable outage time....

As shown on page 1 of Jones Exhibit 1, Duke Energy Carolinas achieved a net nuclear capacity factor, excluding reasonable outage time, of 102.69% for the current period. This capacity factor is well above the 92.5% set forth in S.C. Code § 58-27-865.

Q. PLEASE DISCUSS OUTAGES OCCURING AT THE COMPANY'S NUCLEAR FACILITIES DURING THE TEST PERIOD.

A. Refueling requirements, maintenance requirements, NRC operating requirements, and the complexity of operating nuclear generating units impact the availability of the Company's nuclear system. However, over the course of the years of operating the nuclear fleet the Company's nuclear performance has improved dramatically. Shorter refueling outages and improved forced outage rates have contributed to increasing the capacity factor of the nuclear fleet to consistently above 90%. There were four refueling outages during the test period, including two that were extended for additional work. If an unanticipated issue is discovered while a unit is offline for a scheduled outage, the outage is extended if necessary to take the time to perform necessary maintenance or repairs prior to returning the unit to service. It is our belief that such extensions during non-peak periods result in longer continuous run times and fewer forced outages thereby reducing fuel costs in the long run. In the event that a unit is forced off line, every effort is made to safely return the unit to service as quickly as possible. During the test period, there was only one forced outage on the Duke Energy Carolinas nuclear generating system that lasted greater than one week. Page 2 of Jones Exhibit 1 shows the dates of and explanations for all outages of a week or more in duration. The outage that occurred at the Catawba Nuclear Station on May 20, 2006 merits additional explanation. The station experienced a loss of electrical power from off-site resources which resulted in both generating units automatically shutting down as designed in such an event. The failure of a high voltage component in the switchyard caused protective relaying to isolate the fault as designed. Inappropriate settings of certain relays in the switchyard on the transmission system caused additional breakers to open, separating Catawba Units 1 and 2 from the Duke Energy Carolinas transmission grid and all off-site power. When the units automatically shut down the emergency diesel generators started and supplied power to essential equipment as needed. The plant operators responded exceptionally well to this extremely challenging event, as did the emergency organization that assembled to support them. While the cause of the event was external to the nuclear station, it demonstrated the effectiveness of the station's protective systems and the ability of its operators to successfully manage this challenge.

Q. PLEASE DISCUSS THE PLANNED OUTAGE SCHEDULE FOR THE FORECAST PERIOD.

Page 3 of Jones Exhibit 1 shows the dates of and explanations for forecast outages of a week or more in duration. *****BEGIN CONFIDENTIAL***** [redacted] *****END CONFIDENTIAL*****

Q. MR. JONES, PLEASE DESCRIBE THE COMPONENTS THAT MAKE UP NUCLEAR FUEL.

A. In order to prepare uranium for use in a nuclear reactor, it must be processed from an ore to a ceramic fuel pellet. This process is commonly broken into four distinct stages, 1) mining and milling, 2) conversion, 3) enrichment, and 4) fabrication. Please refer to Jones Exhibit 2 for a graphical representation of this process.

Uranium is usually mined by either surface (open cut) or underground mining techniques, depending on the depth of the ore deposit. The ore is then sent to a mill where it is crushed and ground-up before the uranium is extracted by leaching, the process in which either a strong acid or alkaline solution is used to dissolve the uranium. Once dried the uranium oxide (U_3O_8) concentrate, often referred to as yellowcake, is packed in drums for transport to a conversion facility. Alternatively, uranium may be mined by in situ leach (ISL) in which oxygenated groundwater is circulated through a very porous ore body to dissolve the uranium and bring it to the surface. ISL may also use slightly acid or alkaline solutions to keep the uranium in solution. The uranium is then recovered from the solution as in a conventional mill.

The only uranium enrichment processes commercially available today require uranium to be in the form of a gas and uranium hexafluoride (UF_6) is the gaseous form that is best suited for industrial isotopic separation. The process of chemically converting the U_3O_8 to UF_6 for subsequent enrichment is known as conversion.

Naturally occurring uranium primarily consists of two isotopes, 0.7% U-235 and 99.3% U-238. Duke Energy Carolinas' nuclear reactors require a higher concentration of U-235 to operate, typically in the 3-5% range. The process of increasing the concentration of U-235 is known as enrichment. The two commercially available enrichment processes, gaseous diffusion and gas centrifuge, operate based on the mass differences between the uranium isotopes ultimately separating natural uranium gas into two gas streams, one being enriched to the desired level of U-235, known as low enriched uranium, and the other being depleted in U-235, known as tails.

Once the UF6 is enriched to the desired level, it is converted to uranium dioxide (UO_2) powder and formed into pellets. This process and subsequent steps of inserting the fuel pellets into fuel rods and bundling the rods into fuel assemblies for use in nuclear reactors is referred to as fabrication.

In terms of the breakdown of cost between these four stages – for fuel batches recently operating in Duke Energy Carolinas' reactors, uranium concentrates has represented approximately 30% of the total direct fuel cost. Conversion services, enrichment services, and fabrication services have represented approximately 5%, 45%, and 20%, respectively. Duke Energy

Carolinas expects that the uranium concentrates component will increase its relative percentage of total direct fuel cost in the future due to the recent market price increases experienced in this sector.

Q. PLEASE PROVIDE A SUMMARY OF DUKE ENERGY CAROLINAS NUCLEAR FUEL PROCUREMENT PRACTICES.

A. Jones Exhibit 3 sets forth the Company's Nuclear Fuel Procurement Practices.

Q. MR. JONES, WHAT CHANGES HAVE OCURRED IN THE UNIT COST OF THE VARIOUS STAGES OF NUCLEAR FUEL DURING THE TEST PERIOD?

A. As discussed earlier, uranium concentrates and enrichment services represent the largest cost components of nuclear fuel supply.

Spot market prices for uranium concentrates have climbed more than five hundred percent since market lows experienced in calendar year 2000. However, Duke Energy Carolinas has a portion of its forward uranium requirements covered under existing long term supply contracts, many of which were negotiated prior to the test period. Deliveries pursuant to such contracts during the test period were typically priced lower than prevailing spot market prices in the period. As a result, the unit cost of the Company's purchases of uranium concentrates decreased from $13.70/lb in the prior reporting period to $12.51/lb in the test period (Jones Exhibit 4) due to a larger percentage of Duke Energy Carolinas' total purchases in the test period being obtained through legacy long term contracts (as opposed to spot market purchases).

Spot market prices for enrichment have increased more than fifty percent since market lows also experienced in calendar year 2000. Similar to uranium concentrates described above, Duke Energy Carolinas has a portion of its forward enrichment requirements covered under long term supply contracts. One hundred percent of the Company's enrichment deliveries during the test period were pursuant to such long term contracts. As such, the unit cost of enrichment purchased by Duke Energy Carolinas in the test period was comparable to that purchased in the prior reporting period.

Costs for fabrication services represent a moderate portion of overall fuel cost. Market prices in this supply stage have been reasonably stable in recent years. Additionally, Duke Energy Carolinas maintains complete coverage under long term contracts for supply of fabrication services. The unit cost for fabrication services purchased by the Company in the test period was also comparable to that purchased in the prior test period.

Although the unit cost of Duke Energy Carolinas' purchases of conversion increased during the test period, these increased costs have a limited impact on the overall reported fuel expense rate given that the dollar amounts for these purchases represent a much smaller portion of the total direct fuel cost relative to the other fuel supply stages described above.

Q. DURING THE TEST PERIOD DID THE COMPANY RECEIVE A SETTLEMENT PAYMENT FOR LITIGATION RELATING TO ENRICHMENT SERVICES FOR NUCLEAR FUEL?

A. Yes. Duke Energy Carolinas participated with eight other utility companies in litigation against the Department of Energy ("DOE") related to charges by the DOE for enrichment services. The utilities alleged that the DOE had overcharged them for enrichment services that they purchased over a period of time under contracts with the DOE. After approximately ten years of litigation following the initial filing, the utilities and DOE entered into negotiations designed to resolve the utility claims without further trial or adjudication. Ultimately, the parties reached a settlement under which the DOE paid $54.5 million dollars to the utilities, of which Duke Energy Carolinas and the Catawba Joint Owners' combined share was the largest of the individual utility participants at approximately $16 million. During the test period, the Company received $12 million for its allocated share of the settlement net of the Catawba Joint Owners' approximately $4 million share. Although Duke Energy Carolinas incurred litigation expenses on behalf of its customers to achieve this settlement, the Company has elected to offset fuel expenses with the total proceeds of the settlement (less the Catawba Joint Owners' Share) in order to mitigate the impact of rising fuel costs on its South Carolina customers.

Q. WHAT CHANGES DO YOU SEE IN THE COMPANY'S NUCLEAR FUEL COST IN THE JULY 2006 THROUGH SEPTEMBER 2007 FORECAST PERIOD?

A. Duke Energy Carolinas does not anticipate a significant increase in nuclear fuel expense through the subject forecast period. Since fuel is typically expensed over two to three operating cycles – roughly three to five years - Duke Energy Carolinas' nuclear fuel expense in the upcoming forecast period will be determined by the cost of fuel assemblies loaded into the reactors during the test period as well as prior periods. The costs of the fuel residing in the reactors during the test period will be predominantly based on contracts negotiated prior to the recent market price increases. As a result, fuel expense during the forecast period is expected to remain in the 0.40 to 0.45 cents per kWh range over the period. As fuel with a low cost basis is discharged from the reactor and lower priced legacy contracts expire, nuclear fuel expense is expected to increase in the future.

Although costs of certain components of nuclear fuel are expected to increase in future years, nuclear fuel costs on a kilowatt-hour basis will likely continue to be a fraction of the kilowatt-hour cost of fossil fuel. Therefore, customers will continue to benefit from the Company's diverse generation mix and the strong performance of its nuclear fleet through lower fuel costs than would otherwise result absent the significant contribution of nuclear generation to meeting customers demands.

Q. MR. JONES, DOES THAT CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

DUKE ENERGY CAROLINAS
SOUTH CAROLINA FUEL CLAUSE
2006 ANNUAL FUEL HEARING
NUCLEAR PLANT PERFORMANCE
CAPACITY FACTOR 7/05 - 6/06

1	Nuclear System Actual Net Generation During Test Period		57,820,026	MWH
2	Total Number of Hours During Test Period		8,760	
3	Nuclear System MDC During Test Period		6,996.0	MW
4	Reasonable Nuclear System Reductions		4,979,291	MWH
5	Nuclear System Capacity Factor	$\left[\frac{1}{((2*3)-4)}\right]*100$	102.69	%

DUKE ENERGY CAROLINAS
SOUTH CAROLINA FUEL CLAUSE
2006 ANNUAL FUEL HEARING
NUCLEAR PLANT PERFORMANCE

Nuclear Outages Lasting One Week Or More - Current Period

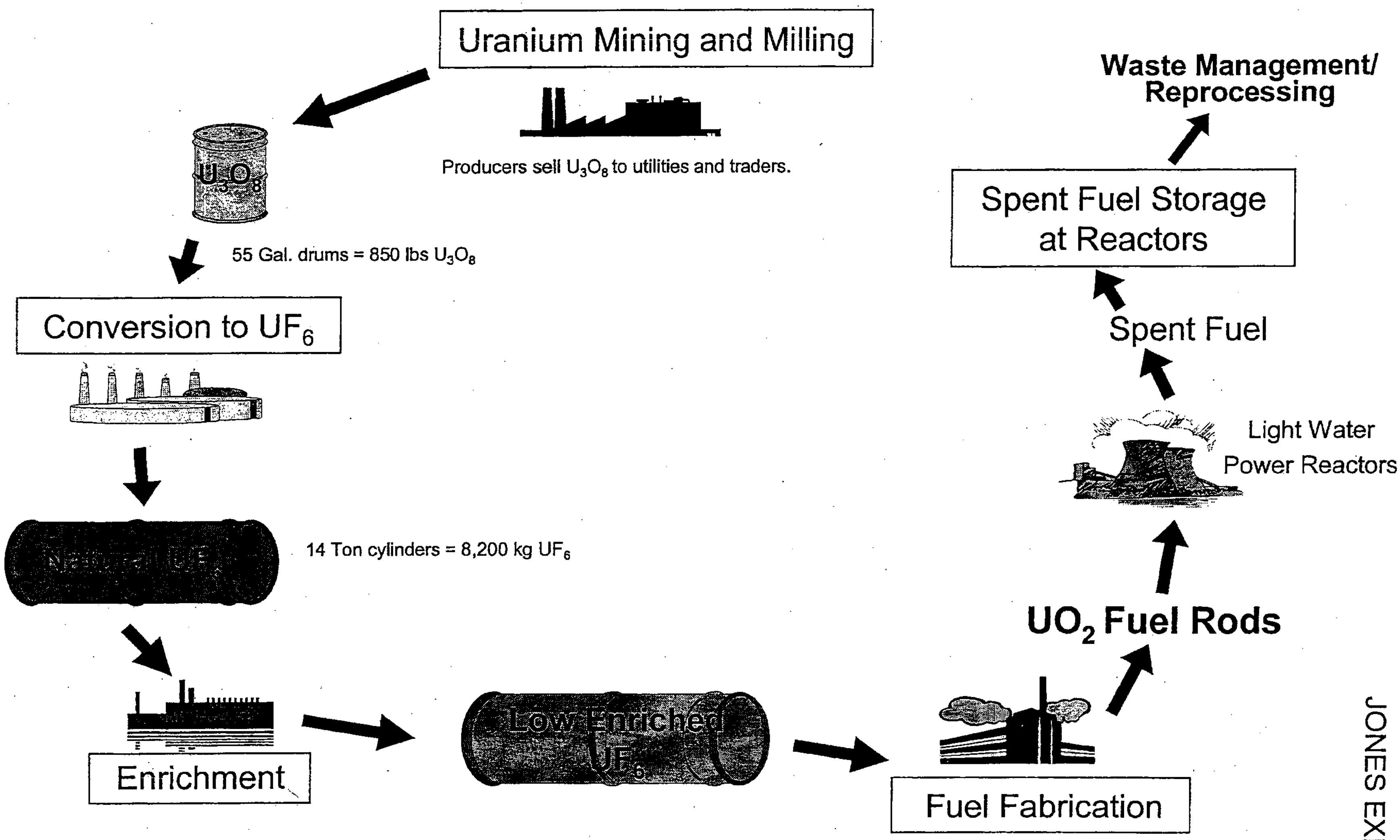
Unit	Date of Outage	Explanation of Outage
Oconee 1	06/14/06-06/21/06	Scheduled inspection of reactor building emergency sump piping
Oconee 2	10/22/05-11/30/05	Scheduled Refueling - EOC 21; Includes six day delay due to unanticipated mechanical problems
Oconee 3	04/29/06-06/03/06	Scheduled Refueling - EOC 22
McGuire 1	09/17/05-10/18/05	Scheduled Refueling - EOC 17
Catawba 1	05/20/06-06/10/06	Loss of offsite power (Automatic reactor/turbine trip)
Catawba 2	03/18/06-04/24/06	Scheduled Refueling - EOC 14; Includes six day delay due to fuel assembly issues and cono seal leak

DUKE ENERGY CAROLINAS
SOUTH CAROLINA FUEL CLAUSE
2006 ANNUAL FUEL HEARING
NUCLEAR PLANT PERFORMANCE

Nuclear Outages Lasting One Week Or More - Forecast Period

Pursuant to 26 S.C. Code Ann. Regs. 103-804(Y)(2), this page 3 of Jones Exhibit 1 is redacted in its entirety with the exception of the heading set forth above.

The Nuclear Fuel Cycle



JONES EXHIBIT 2

JONES EXHIBIT 3

Duke Energy Carolinas Nuclear Fuel Procurement Practices

The Company's nuclear fuel procurement practices are summarized below.

- Near and long-term consumption forecasts are computed based on factors such as: nuclear system operational projections given fleet outage/maintenance schedules, adequate fuel cycle design margins to key safety licensing limitations, and economic tradeoffs between required volumes of uranium and enrichment necessary to produce the required volume of enriched uranium.
- Nuclear system inventory targets are determined and designed to provide: reliability, insulation from short-term market volatility, and sensitivity to evolving market conditions. Inventories are monitored on an ongoing basis.
- On an ongoing basis, existing purchase commitments are compared with consumption and inventory requirements to ascertain additional needs.
- Qualified suppliers are invited to make proposals to satisfy additional or future contract needs.
- Contracts are awarded based on the lowest evaluated offer, considering factors such as price, reliability, flexibility and supply source diversification/portfolio security of supply.
- Spot market solicitations are conducted to supplement the contract structure as appropriate based on comparison to supplies which may be available through alternative means (such as supplies available pursuant to volume flexibilities available under long term contracts in Duke Energy Carolinas' portfolio).
- Delivered volumes of nuclear fuel products and services are monitored against contract commitments. The quality and volume of deliveries are confirmed by the delivery facility to which Duke Energy Carolinas has instructed delivery. Payments for such delivered volumes are made after Duke Energy Carolinas' receipt of such delivery facility confirmations.

JONES EXHIBIT 4

DUKE ENERGY CAROLINAS
SOUTH CAROLINA FUEL CLAUSE
2006 ANNUAL FUEL HEARING
NUCLEAR FUEL PURCHASES
JULY 2005 - JUNE 2006

URANIUM

Pounds Purchased	3,647,191
Avg. Price/Pound	$12.51